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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,789	07/31/2003	Jin-Ru Chen		7882

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BRUCE H. TROXELL
SUITE 1404
5205 LEESBURG PIKE
FALLS CHURCH, VA 22041

EXAMINER

ZAIDI, SYED

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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02/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/630,789

Applicant(s)

CHEN ET AL.

Examiner

Syed Zaidi

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on November 28th, 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/31/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed November 28th 2007 with respect to the rejection of claims claims # 1, 3- 4, 6-9, 12-14 and 16-20 have been fully considered but they moot are in view of new grounds of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bollay et al. (US Patent # US 7,046,666 B1)** in view of **Ingmar et al.**, (US Publication # 2005/0160174 A1).

Consider claim 1, Bollay et al. disclose a system for detecting a connection status in a network (column 3 lines 60-67), wherein the network comprises at least a first node and a second node (column 4

lines 48-55), the system comprising: a request frame, transmitted by the first node including a source address comprising a media access control (MAC) address of the first node (column 4 lines 15-20) and a reply frame, transmitted by the second node (column 4 lines 25-35) after receiving the request frame (column 4 lines 28-34), including a destination address comprising the MAC address of the first node (column 4 lines 14-20); wherein the first node determines the connection status in a link layer (column 5 lines 65-67) according to whether receiving the reply frame (column 6 lines 1-5). However **Bollay et al.** does not disclose the request frame and the reply frame are formed independent of an IP address.

In the same field of endeavor, **Ingmar et al.**, discloses a method to the request frame and the reply frame are formed independent of an IP address (Paragraphs 0063 lines 1-22).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to incorporate the the request frame and the reply frame are formed independent of an IP address as taught by **Ingmar et al.**, with the method of **Bollay et al.** in order to independent of an IP address.

Consider claims 2 and 14, and as applied to **claims 1, 12 and 19**, respectively, **Bollay et al.** as modified by **Ingmar et al.**, disclose a system, method and network for detecting a connection status in a network (column 6 lines 4-5), wherein the first node re-transmits the request frame if not receiving the reply frame within a predetermined response time period (column 10 lines 56-64 and figure # 3 and device 320 or 340).

Consider claim 3, as applied to **claims 1**, **Bollay et al.** as modified by **Ingmar et al.**, disclose a system for detecting a connection status in a network, wherein both the destination address (column 9 lines 24-28) of the request frame and the source address of the reply frame comprise a MAC address of the second node (column 4 lines 15- 25).

Consider claim 4, as applied to **claim 1**, **Bollay et al.** as modified by **Ingmar et al.**, and disclose a system for detecting a connection status in a network, wherein both the destination address

of the request frame and the source address of the reply frame
comprise a MAC broadcast address (column 4 lines 34-46).

Consider claim 5, and 15, and as applied to claims 1 and 12
respectively, **Bollay et al.** as modified by **Ingmar et al.**, clearly
disclose a system and method for detecting a connection status in a
network, wherein the first node and the second node (column 4 lines
14-20), comprise a network interface card (NIC) or a switch (column
10 lines 17-25).

Consider claim 6, and 16, and as applied to claims 5 and 15
respectively, **Bollay et al.** as modified by **Ingmar et al.**, clearly
shows and discloses a system and method for detecting a
connection status in a network, respectively, wherein if the second
node (column 4 lines 14-20) comprises the NIC (column 10 lines 17-
25) it transmits the reply frame when the destination address of the
received request frame comprises a MAC address of the second
node (column 4 lines 14-20).

Consider claim 7, and 17, and as applied to claims 5 and 15 respectively **Bollay et al.** as modified by **Ingmar et al.**, disclose a system and method for detecting a connection status in a network, wherein if the second node comprises the switch (column 4 lines 14-20) it transmits the reply frame when the destination address (column 9 lines 24-33) of the received request frame comprises a MAC broadcast address (column 12 lines 10-20).

Consider claimS 8, and 18, and as applied to claims 5 and 15 respectively, **Bollay et al.** as modified by **Ingmar et al.**, clearly discloses a system and method for detecting a connection status in a network, wherein if the second node comprises the switch, it selectively transmits the reply frame (column 10 lines 56-64 and figure # 3 and device 320 or 340) when the destination address of the received request frame (column 9 lines 24-33) comprises a MAC address of the second node (column 4 lines 14-20).

Consider claim 9, and as applied to claim 1, Bollay et al., as modified by **Ingmar et al.**, and disclose a system for detecting a

connection status in a network, both the request and the reply frame comprise an op code for indicating the request frame and the reply frame respectively (column 4 lines 21-34).

Consider claim 10, as applied to **claim 1, Bollay et al.** and as applied to **claim 1**, as modified by **Ingmar et al.**, clearly shows and discloses a system for detecting a connection status in a network, wherein both the request frame (column 4 lines 15-25) and the reply frame comprise an identifier for indicating supporting the system (column 13 lines 9-15).

Consider claim 11, as applied to **claim 1 Bollay et al.** and, as modified by **Ingmar et al.**, clearly shows and discloses a system for detecting a connection status in a network, wherein the network is an Ethernet network (column 10 lines 17-22 and figure # 3).

Consider claim 12, Bollay et al. clearly shows and discloses a method for detecting a connection status in a network (column 3 lines 60-67), wherein a first node and a second node are connected via the

network, the method comprising (column 12 lines 28-32) transmitting a request frame to the network by the first node (column 12 lines 28-32) wherein the request frame includes a source address comprising a media access control (MAC) address of the first node (column 4 lines 15-20); transmitting a reply frame to the network by the second node when the second node the request frame(column 4 lines 25-35), wherein the reply frame includes a destination address comprising the MAC address of the first node (column 4 lines 14-20) and determining, by the first node in a link layer (column 5 lines 65-67), the connection status according to whether receiving the reply frame method, for detecting a connection status in a network.

However **Bollay et al.** does not disclose the request frame and the reply frame are formed independent of an IP address.

In the same field of endeavor, **Ingmar et al.**, discloses a method to the request frame and the reply frame are formed independent of an IP address (Paragraphs 00063 lines 1-22).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to incorporate the the request frame and the reply frame are formed independent of an IP

address as taught by **Ingmar et al.**, with the method of **Bollay et al.**
in order to independent of an IP address.

Consider claim 13, as applied to **claims 12, Bollay et al.**
and as modified by **Ingmar et al.**, clearly shows and discloses a
method for detecting a connection status in a network, wherein the
first node determines the connection status through checking whether
the reply frame is received within a predetermined response time
period after the first node transmits the request frame (column 11
lines 10-39).

Consider claim 19, Bollay et al. clearly shows and discloses a
network apparatus for detecting a connection status in a network
(column 3 lines 60-67), wherein a network apparatus and a second
network apparatus are connected via the network, network apparatus
comprising (column 12 lines 28-32) transmitting a request frame to
the network (column 12 lines 28-32) wherein the request frame
includes a source address comprising a media access control (MAC)
address of network apparatus (column 4 lines 15-20); transmitting a

reply frame to the network by the network apparatus when the network apparatus request frame (column 4 lines 25-35), wherein the reply frame includes whether comprising the MAC address of the network apparatus (column 4 lines 14-20) and determining, by the network apparatus in a link layer (column 5 lines 65-67), the connection status according to whether receiving the reply frame method, for detecting a connection status in a network. However **Bollay et al.** does not disclose the request frame and the reply frame are formed independent of an IP address.

In the same field of endeavor, **Ingmar et al.**, discloses a method to the request frame and the reply frame are formed independent of an IP address (Paragraphs 00063 lines 1-22).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to incorporate the the request frame and the reply frame are formed independent of an IP address as taught by **Ingmar et al.**, with the network apparatus of **Bollay et al.** in order to independent of an IP address.

Consider claim 20, as applied to **claims 19, Bollay et al. and** as modified by **Ingmar et al.**, disclose the network apparatus, wherein the network (column 6 lines 4-5) apparatus re-transmits the request frame the reply frame is not received within a predetermined response time period (column 15 lines 6-15).

Conclusion

Any response to this Office Action should be **faxed to (571)**

273-8300 or mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Syed Zaidi

whose telephone number is (571) 270-1779. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the Examiner by telephone are

Unsuccessful, the Examiner's supervisor, Seema S. Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Application/Control
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Syed Zaidi
S.Z/s.z

February 14 2008.



CHI PHAM
SUPERVISORY PATENT EXAMINER

2/19/08